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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,142	10/21/2003	L. Murray Dallas	15912/09034	6042
27530	7590 03/22/2005		EXAMINER	
NELSON MULLINS RILEY & SCARBOROUGH, LLP			BOCHNA, DAVID	
1320 MAIN S COLUMBIA.	TREET, 17TH FLOOR SC 29201		ART UNIT	PAPER NUMBER
,			3679	
		•	DATE MAIL ED: 03/22/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

./		Application No.	Applicant(s)	1
1		10/690,142	DALLAS, L. MURRAY	
•	Office Action Summary	Examiner	Art Unit	
		David E. Bochna	3679	
Period fo	The MAILING DATE of this communication or Reply	appears on the cover sheet with th	e correspondence address	
A SH THE - Exte after - If the - If NO - Faill Any	ORTENED STATUTORY PERIOD FOR REI MAILING DATE OF THIS COMMUNICATIO nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory per rize to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a reply be reply within the statutory minimum of thirty (30) iod will apply and will expire SIX (6) MONTHS first tute, cause the application to become ABANDO	e timely filed days will be considered timely. rom the mailing date of this communication. NED (35 U.S.C. § 133).	
Status				
1)🛛	Responsive to communication(s) filed on 19	9 <u>November 2004</u> .		
2a)⊠		This action is non-final.	•	
3)	Since this application is in condition for allocal closed in accordance with the practice under	•	•	
Disposit	ion of Claims			
5)	Claim(s) 1-31 is/are pending in the application 4a) Of the above claim(s) is/are without claim(s) is/are allowed. Claim(s) 1-31 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and	drawn from consideration.		
Applicat	ion Papers			
10)⊠	The specification is objected to by the Examination The drawing(s) filed on 21 October 2003 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the contraction of the oath or declaration is objected to by the	are: a) ☐ accepted or b) ☑ object the drawing(s) be held in abeyance. rection is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).	
Priority (ınder 35 U.S.C. § 119			
a)	Acknowledgment is made of a claim for fore All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the p application from the International Bur See the attached detailed Office action for a	ents have been received. ents have been received in Applic priority documents have been rece reau (PCT Rule 17.2(a)).	cation No sived in this National Stage	
Attachmen	• •	»□···-	(77.2 44.0)	
2) 🔲 Notic 3) 🔯 Infori	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/ r No(s)/Mail Date <u>11/19/04</u> .			

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter of claim 23 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Volpin.

In regard to claim 20, Volpin discloses a metal ring gasket 10 ("for use as a seal threaded union" is considered intended use and given little patentable weight), the metal ring gasket comprising a generally annular body having a substantially flat top surface and substantially bottom surface ("for being deformably compressed between first and second subcomponents of the threaded union, the metal ring gasket providing a high-pressure, energized seal when mating ends of the first and second components are forced to abut by a nut for interconnecting the first and second subcomponents of the threaded union" is also considered intended use an is given little patentable weight as long as the applied prior art is capable of fulfilling the intended use, which the metal gasket disclosed by Volpin is capable of fulfilling).

4. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Putch et al.

In regard to claim 20, Putch et al. discloses a metal ring gasket (ring just above number 74 in fig. 1A) for use as a seal threaded union, the metal ring gasket comprising a generally annular body having a substantially flat top surface and substantially flat bottom surface for being deformably compressed between first and second subcomponents of the threaded union, the metal ring gasket providing a high-pressure, energized seal when mating ends of the first and second components are forced to abut by a nut for interconnecting the first and second subcomponents of the threaded union.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claims 1, 3-7, 10, 12-14, 28 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putch et al. in view of Laird.

In regard to claims 1, 4 and 28, Putch et al. discloses a threaded union, comprising:

first 14 and second 18 subcomponents are inter-connected by, the first and second subcomponents having respective mating ends that are forced together and abut when securely interconnected, the first and second subcomponent having complementary ring gasket grooves therein; and

a metal ring gasket (ring just above the numeral 74 in fig. 1A) received the complementary ring gasket grooves, the metal ring gasket providing a high-pressure seal between the mating ends of the and second subcomponents when securely interconnected. However, Putch et al. discloses that the first and second components are securely connected by bolts and not a nut. Laird teaches that connecting two components by either bolts 24 or a nut 30 are equivalents in the art. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the bolts of Putch et al. to include a nut, as taught by Laird.

In regard to claims 3, 12 and 30-31, the nut 30 is a spanner nut that is torqued using a wrench.

In regard to claim 5, wherein the metal ring gasket (ring just above numeral 74) is compressed between the mating ends of the first 14 and second 18 subcomponents.

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In regard to claim 6, wherein the metal ring gasket is seated an annular groove in the mating end of the first subcomponent 14.

In regard to claim 7, wherein the annular groove has beveled sides.

In regard to claim 10, wherein the second subcomponent 18 has a beveled annular groove having a bevel angle equal to an upper bevel angle of the metal ring gasket.

In regard to claim 13, the first subcomponent 14 is a wellhead and the second subcomponent is a drilling flange 18.

In regard to claim 14, the first subomponent is a wellhead and the second subcomponent is a casing mandrel.

In regard to claim 29, wherein the step of securing the second subcomponent the first subcomponent tightening the threaded nut comprises hammering lugs 30 on the threaded nut.

- 7. Claims 2, 11 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putch et al. in view of Laird and further in view of Parmesan. Putch et al. in view of Laird discloses a coupling as described above, but does not disclose that the nut is a wing nut, which is torqued to a predetermined torque by a hammer. Parmesan teaches that hammer nuts and spanner nuts, which are torqued by a wrench are equivalents in the art. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the spanner nut of Laird a hammer nut because hammer nuts and spanner nuts are well known equivalents in the art, as demonstrated by Parmesan.
- 8. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putch et al. in view of Laird. Putch et al. in view of Laird discloses a beveled annular groove as described above, but does not disclose the exact angle of the bevel. However, it would have been obvious

to make the bevels of the groove 23 degrees from the vertical, plus or minus 1 degree because a change in the shape of a prior art device is a design consideration within the skill of the art. <u>In re Dailey</u>, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

- 9. Claims 15-19, 21-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volpin. Volpin discloses the use of a ring gasket as described above, but does not specifically disclose what type of material the gasket is made from. However it would have been obvious to make the gasket out of the materials recited by the Applicant because the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).
- 10. Claims 21-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putch et al. Putch et al. discloses the use of a ring gasket as described above, but does not specifically disclose what type of material the gasket is made from. However it would have been obvious to make the gasket out of the materials recited by the Applicant because the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).
- 11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Volpin.

Volpin. discloses a metal ring gasket with a polygonal cross-section as described above, but does not disclose that the ring has an octagonal cross-section. However, it would have been obvious to make the ring with an octagonal shape because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

12. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Putch et al.

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Putch et al. discloses a metal ring gasket with a polygonal cross-section as described above, but does not disclose that the ring has an octagonal cross-section. However, it would have been obvious to make the ring with an octagonal shape because a change in the shape of a prior art device is a design consideration within the skill of the art. <u>In re Dailey</u>, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Response to Arguments

5. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

David Bochna

Primary Examiner Art Unit 3679

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March 10, 2005